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10/068,675	02/06/2002	Charles E. Romano JR.	83161LMB	8799

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EXAMINER

SHEWAREGED, BETELHEM

ART UNIT

PAPER NUMBER

1774

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DATE MAILED: 07/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,675

Applicant(s)

ROMANO ET AL.

Examiner

Betelhem Shewareged

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 18-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,9 and 12-17 is/are rejected.
- 7) ☒ Claim(s) 4-8,10 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-17, drawn to recording element, classified in class 428, subclass 195.
 - II. Claims 18-27, drawn to method of printing on the recording element, classified in class 347, subclass 105.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process of using that product, (e.g., using the recording element as wall paper).
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. During a telephone conversation with Lynne M. Blank on 06/18/2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-17. Applicant in replying to this Office Action must make affirmation of this election. Claims 18-27 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

7. Claims 1, 2, 13 and 15-17 are rejected under 35 U.S.C. 102(a) as being anticipated by Kobayashi et al. (US 6,214,458 B1).

Kobayashi discloses an image recording sheet for ink jet printing comprising a support film, an image receiving layer provided on one side of the support and a white coated layer provided on the other side of the support (abstract). A subbing layer containing gelatin is provided between the support film and the image receiving layer (col. 4, line 16). The subbing layer is equivalent to the claimed hydrophilic absorbing layer, and the image receiving layer is equivalent to the claimed hydrophilic overcoat polymer layer. The image receiving layer comprises a resin such as water soluble resin and inorganic particles and/or organic particles (col. 4, line 47). Methyl cellulose is an example of the water soluble resin (col. 4, line 56), and the organic particle can be a

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polymer latex (col. 5, line 30). The ratio of resin to latex is 9:1 to 5:5 (col. 15, line 33), wherein this value is equivalent to the claimed value. The image receiving layer has a thickness ranging from 1 to 50 um (col. 16, line 58), wherein the thickness overlaps with the claimed range. The image receiving layer further comprises a mordant to fix dyes (col. 16, line 39).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 3, 9, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (US 6,214,458 B1) in view of Burns et al. (US 6,089,704) and Peternell et al. (US 6,420,016 B1).

Kobayashi discloses an image recording sheet comprising a support film, an image receiving layer provided on one side of the support and a white coated layer provided on the other side of the support (abstract). A subbing layer containing gelatin is provided between the support film and the image receiving layer (col. 4, line 16). The subbing layer is equivalent to the claimed hydrophilic absorbing layer, and the image receiving layer is equivalent to the claimed hydrophilic overcoat polymer layer. With respect to claim 14, since Kobayashi expressly fails to disclose modified gelatin to be contained in the subbing layer, the Examiner interprets the gelatin in the subbing layer

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as unmodified gelatin. The image receiving layer comprises a resin such as water soluble resin and inorganic particles and/or organic particles (col. 4, line 47). The organic particle can be polymer latex (col. 5, line 30). Kobayashi does not disclose the components of the polymer latex as recited in claim 3.

Burns teaches an ink jet recording element comprising a support, a hydrophilic image recording layer (equivalent to the claimed hydrophilic absorbing layer) on the support, and an overcoat layer comprising a vinyl latex polymer (equivalent to the claimed hydrophilic overcoat polymer layer) on the hydrophilic image recording layer.

The latex polymer has the following formula:



wherein:

A is a monomer such as hydroxyethylacrylate, hydroxyethylmethacrylate, acrylic acid, methacrylic acid, acrylic acid, vinyl alcohol, acrylamide or methacrylamide;

B is a monomer such as methylacrylate, methylmethacrylate, butylacrylate, butylmethacrylate, ethylacrylate, ethylmethacrylate, isopropylacrylate, cyclohexylacrylate, norbornylacrylate, vinylacetate or vinylneodeconate;

C is a monomer such as trimethylammonium ethylacrylate chloride, trimethylammonium ethylacrylate methylsulfate, trimethylammonium methylacrylate chloride or trimethylammonium ethylmethacrylate methylsulfate;

x is from about 10 to about 80 mole %;

y is from about 10 to about 80 mole %; and

z is from about 2 to about 20 mole %.

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Kobayashi and Burns are analogous art because they are from the same field of endeavor that is the ink jet recording medium art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the polymer latex of Burns with the invention of Kobayashi so as to provide ink jet recording element which as a high gloss and fast drying time without having a high viscosity (col. 2, lines 9-11).

Kobayashi fails to disclose a pigskin gelatin in the subbing layer containing gelatin, and the reference fails to disclose the thickness of the subbing layer.

Peternell teaches an ink jet recoding layer comprising a support, a gelatin containing absorption layer on the support, and at least on ink receiving layer on the absorption layer (abstract). The absorption layer comprises pigskin gelatin (col. 4, line 3), and has a dry thickness ranging from 3 to 20 um (col. 4, line 15), wherein this range overlaps with the claimed range.

Kobayashi and Peternell are analogous art because they are from the same field of endeavor that is the ink jet recording medium art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the gelatin containing absorption layer of Peternell with the invention of Kobayashi for the fixation of the ink liquid (col. 3, line 17 of Peternell).

Allowable Subject Matter

10. Claims 4-8, 10 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Neither Burns nor Kobayashi teach or suggest (1) a latex polymer as recited in claim 4; (2) an additional layer between the hydrophilic image recording layer and the overcoat layer comprising, and between the subbing layer and image receiving layer, respectively as disclosed in claims 5-8; and (3) modified gelatin as recited in claims 10 and 11.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betelhem Shewareged whose telephone number is 703-305-0389. The examiner can normally be reached on Mon.-Thur. 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on 703-308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5408 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

BS BS.
June 27, 2003.

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

